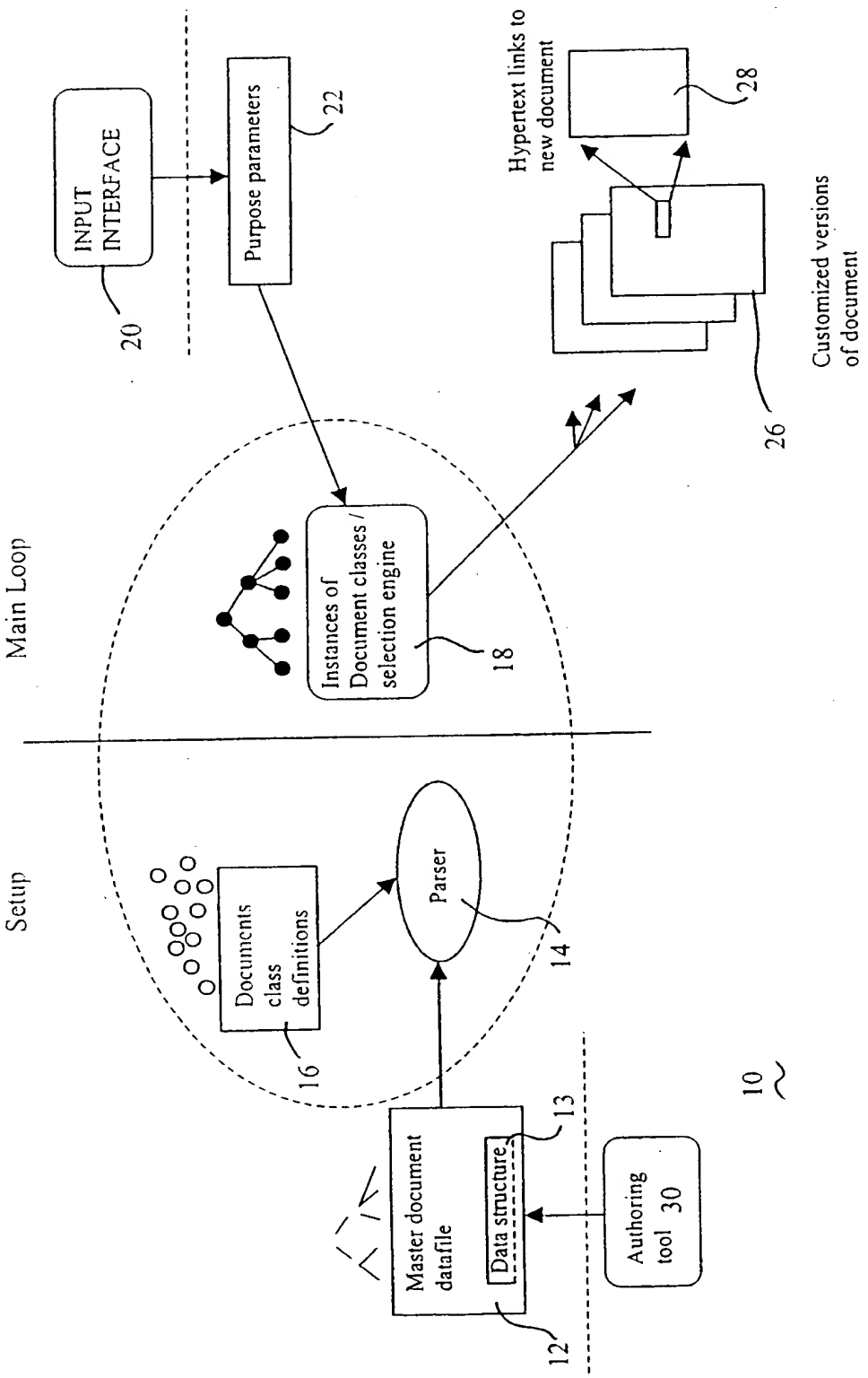
INPUT INTERFACE
20
Purpose parameters
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Customized versions of document
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Main Loop
Instances of Document classes / selection engine
18
Setup
Documents class definitions
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Parser
14
Master document datafile
Data structure
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Authoring tool 30
10

FIGURE 1

Block 1—The parameters:

```
PurposeParameters
  (<feature 1>=<list of possible values>)&
  (<feature 2=<list of possible values>)&
  [Subsequent lines define remaining features]

RepresentationLevelParameters
  (<list of representation levels to output>)
```

Block 2—Identification of the top-level object:

```
toplevel=Document.<name of main Document>
```

Block 3—Definitions of all Documents and their variations:

Sub-block: Definition of a Document and its variations.

Field: Definition of the Document.

```
Document <name of document>
|variations=<list of variations of the document>&
 annotations=<list of annotations>|
```

Field: Definitions of the Document's variations.

Subfield: Definition of a variation of the Document.

```
DocumentVariation <name of document variation>
|condition=<Boolean expression>&
 componentList=<list of components of the document variation>&
 annotations=<list of annotations>|
```

Subsequent subfields define remaining variations of the Document.

Subsequent sub-blocks define remaining Documents and their variations.

Block 4—Definitions of all Sections and their variations:

Sub-block: Definition of a Section and its variations.

Field: Definition of the Section.

```
Section <name of section>
|variations=<list of variations of the section>&
 annotations=<list of annotations>|
```

Field: Definitions of the Section's variations.

Subfield: Definition of a variation of the Section.

```
SectionVariation <name of section variation>
|condition=<Boolean expression>&
 componentList=<list of components of the section variation>&
 annotations=<list of annotations>|
```

Subsequent subfields define remaining variations of the Section.

Subsequent sub-blocks define remaining Sections and their variations.

FIGURE 2 (a)

Block 5—Definitions of all Topics and their variations:

Sub-block: Definition of a Topic and its variations.

Field: Definition of the Topic.

```
Topic <name of topic>
|variations=<list of variations of the topic>&
 annotations=<list of annotations>|
```

Field: Definitions of the Topic's variations.

Subfield: Definition of a variation of the Topic.

```
TopicVariation <name of topic variation>
|condition=<Boolean expression>&
 componentList=<list of components of the topic variation>&
 annotations=<list of annotations>|
```

Subsequent subfields define remaining variations of the Topic.

Subsequent sub-blocks define remaining Topics and their variations.

Block 6—Definitions of all Sentences and their variations:

Sub-block: Definition of a Sentence and its variations.

Field: Definition of the Sentence.

```
Sentence <name of sentence>
|variations=<list of variations of sentence>&
 annotations=<list of annotations>|
```

Field: Definitions of the Sentence's variations.

Subfield: Definition of a variation of the Sentence.

```
SentenceVariation <name of sentence variation>
|condition=<Boolean expression>&
 componentList=<list of components>&
 levelList=<list of representation levels>&
 annotations=<list of annotations>|
```

Subfield: Definitions of the Sentence's representations.

```
SentenceRepLevel <name>
|repLevel=<list of representation levels>&
 componentList=<a string or list of components>&
 annotations=<list of annotations>|
```

Subsequent subfields define remaining variations of the Sentence and their representations.

Subsequent sub-blocks define remaining Sentences and their variations.

FIGURE 2(b)

Block 7—Definitions of all Lexicals and their variations:

Sub-block: Definition of a Lexical and its variations.

Field: Definition of the Lexical.

```
Lexical <name of lexical item>
|variations=<list of variations of lexical item>&
 annotations=<list of annotations>|
```

Field: Definitions of the Lexical's variations.

Subfield: Definition of a variation of the Lexical.

```
LexicalVariation <name of lexical variation>
|condition=<Boolean expression>&
 string=<character string>&
 value=<DocumentClass>.<objectName>&
 annotations=<list of annotations>|
```

Subsequent subfields define remaining variations of the Lexical.

Subsequent sub-blocks define remaining Lexicals and their variations.

Block 8—Definitions of all Words:

Field: Definition of a Word.

```
Word <word>
|value="<word>"|
```

Subsequent fields define remaining Words.

FIGURE 2(c)

```
Annotation <name of the Annotation object>
  |<property>="<value>"&
   <property>="<value>"&
   <Subsequent lines define remaining properties and their values>&
   parent=<name of the immediate ancestor of this Annotation object>|
```

FIGURE 3(a)

SUBSTITUTE SHEET (RULE 26)

```
External <name of the External object>
  |fileName="<file name>"&
   profile=<list of parameters describing current user/audience>|
```

FIGURE 3(b)

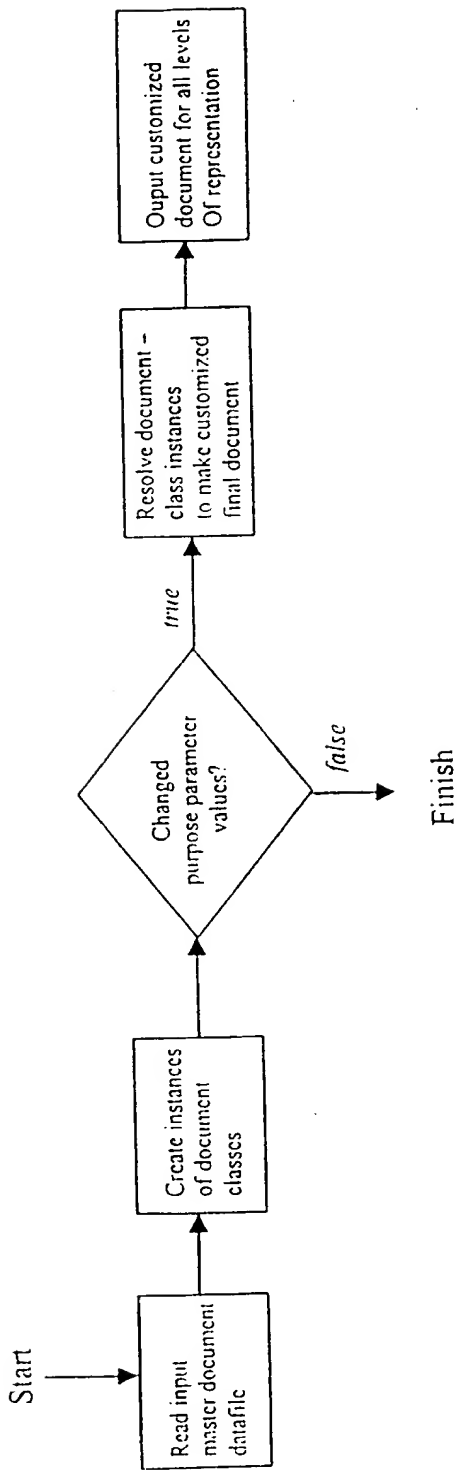
Start
Read input master document datafile
Create instances of document classes
Changed purpose parameter values?
true
false
Finish
Resolve document - class instances to make customized final document
Ouput customized document for all levels Of representation

FIGURE 4

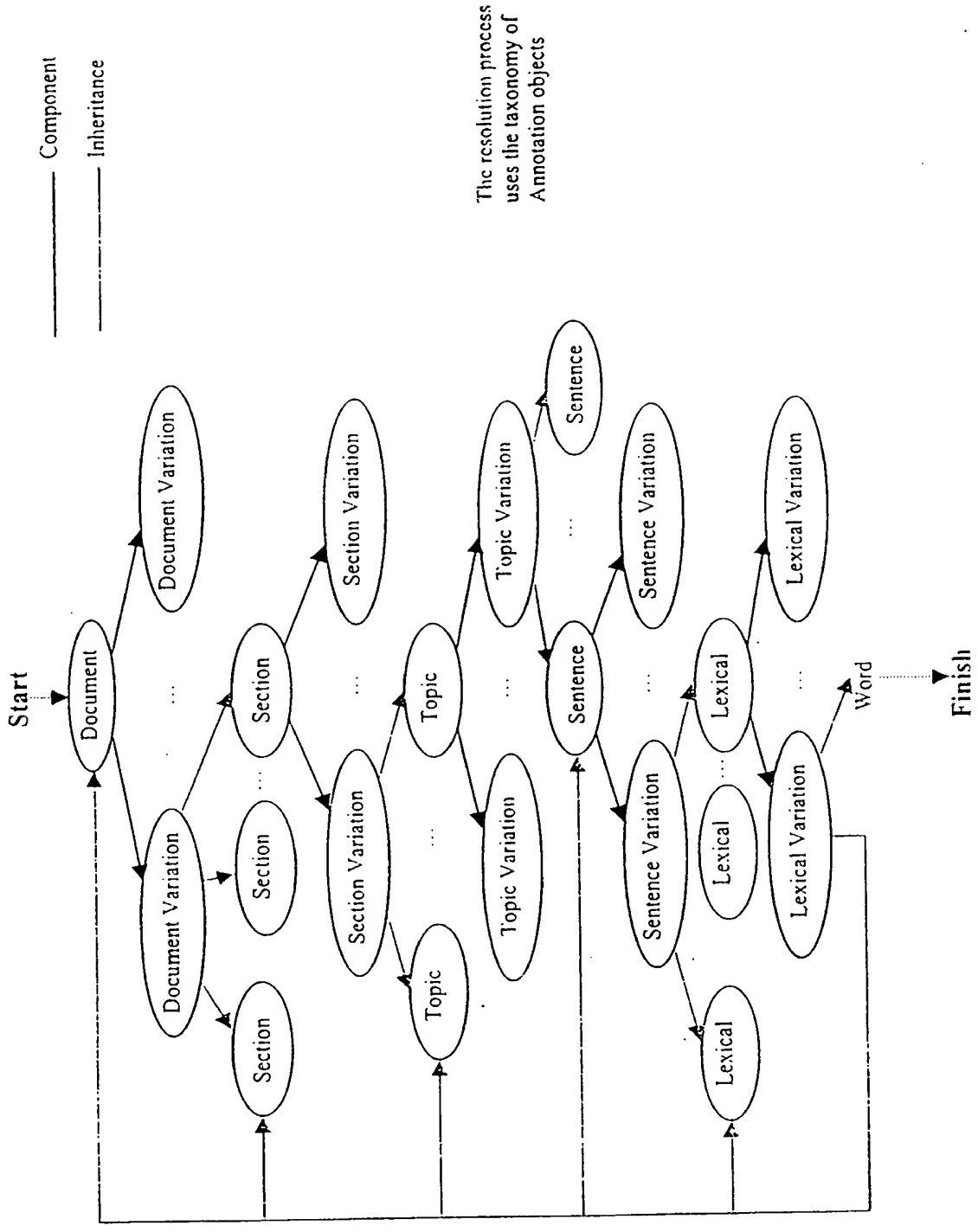
Component
Inheritance
The resolution process uses the taxonomy of Annotation objects
Start
Document
Document Variation
Section
Section Variation
Topic
Topic Variation
Sentence
Sentence Variation
Lexical
Lexical Variation
Word
Finish

FIGURE 5